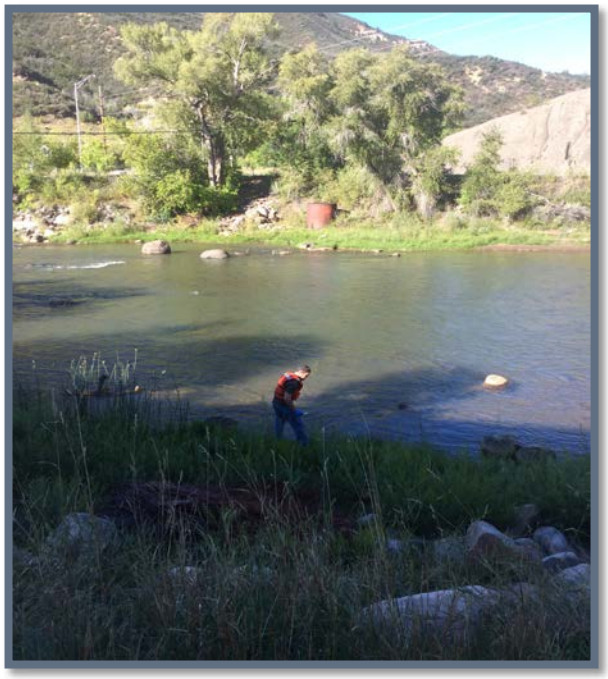
SITUATION REPORT
INCIDENT COMMAND POST GOLD KING
GOLD KING MINE RELEASE INCIDENT
U.S. ENVIRONMENTAL PROTECTION AGENCY



EPA Contractor collecting surface water sample on the Animas River.

Subject:	**EXECSUM / SITREP #39** **Gold King Mine Release Incident** **San Juan County, Colorado** **Latitude: 37.8945 Longitude: -107.6384**
From:	Situation Unit, Incident Command Post Gold King
Date:	19 September 2015
Reporting Period:	0700 18 September 2015 through 0700 19 September 2015
Website:	www.epa.gov/goldkingmine

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EXECUTIVE SUMMARY

Situation Summary

United States Environmental Protection Agency (U.S. EPA) Incident Command Post Gold King (ICPGK) is comprised of U.S. EPA Regions 8, 6 and 9.

Highlights, Key Updates/Changes

- ICPGK Planning Section Issued a new Incident Action Plan (IAP) covering an Operation Period from 0700 17 September 2015 to 0700 22 September 2015.
- ICPGK continues to monitor relations with the Navajo Nation.

Objectives

- Ensure health and safety of the public and responders.
- Continue deliveries of drinking water to residents with contaminated drinking wells.
- Continue sampling of privately-owned water wells within the focus area.
- Implement strategy for private wells exceeding MCL for drinking water.
- Continue coordination with Federal, State, Tribal and local stakeholders.
- Continue management of mine water discharge.
- Continue mine dump and portal stabilization.
- Assess impacts of deposited sediment.
- Identify transition points from current operations to reduced sampling.
- Continue notification to downstream communities of potential impacts resulting from ongoing response activities.
- Explore real time monitoring options.
- Complete delivery of feed for livestock on Navajo Nation.
- Remove non-potable water tanks on Navajo Nation.
- Implement messaging strategy for transition of private water wells and sediment.

Command Emphasis

- For the next operational period, the ICPGK command emphasis will be:
- Safety of responders and the public
- All visitors to the mine site are required to go through a safety briefing. See mine site safety plan.
- For incident personnel to access Southern Ute Tribal lands, they must be escorted by a Southern Ute Staff member.
- All sampling operations in Navajo Nation must be conducted with law enforcement escort.
- Ensure information flow between ICP and Stakeholders is transparent.

The metrics provided in this Situation Report represent quantities reported for work completed on 18 September 2015. Press releases are presented in Attachment 1. Metrics table cells and report text highlighted in yellow represent a change/addition from the previous day's Situation Report.

1.0 BACKGROUND

The Gold King Mine (GKM) near Silverton, Colorado is a historic gold mine at an elevation of approximately 11,300 feet above mean sea level. The mine discharge includes acidic mine drainage that is a contributor of heavy metals into the Cement Creek drainage of the Animas River watershed. The GKM workings have been inaccessible since 1995 when the mine portal collapsed.

On 5 August 2015, an estimated volume of up to three million gallons of water containing sediment and dissolved metals was suddenly released from the Gold King Mine adit. This water discharged into Cement Creek which feeds into the Animas River, and eventually flows into the San Juan River.

The ICPGK (located in Durango, Colorado) continues to assess and mitigate effects from the release. The U.S. EPA continues daily sampling of surface water and sediment from the Animas River, San Juan River and Cement Creek. Additionally, U.S. EPA continues to schedule sampling of private wells within an alluvial area surrounding the Animas River.

2.0 OPERATIONS

2.1 Mine Operations

A summary of mine operations is presented below.

- Mine Operations are utilizing (US Coast Guard) USCG Strike Team personnel to monitor incoming calls, emails and radio traffic.
- USCG Strike Team is conducting contractor oversight.
- Mine Operations has implemented the Traffic Control Plan at junctions above Gladstone.
- Installed road signs to alert travelers.
- Lime addition is ongoing (8 lbs every 9 min).
- Automated lime hopper is being used to dispense lime.
- Diverting Gold King Mine water to the Red and Bonita (R&B) settling ponds.
- Monitoring of treatment process at 5 locations twice daily.
- Average flow rate of approximately 552 gallons per minute (gpm). Pre-treatment pH of 3.56 at Gold King Mine adit portal, and post-treatment pH of 5.29.
- Bolting and Meshing operations continue inside the mine. Preparations are being made to install shotcrete at the mine entrance to stabilize materials in and around the adit / portal.
- Continued construction of the Gladstone settling ponds number 1 through 4.

2.2 River Sampling

Operational activities for surface water and sediment sampling are summarized below. Sample quantities are based on the SCRIBE database, and include field samples and quality assurance/quality control (QA/QC) samples.

Table 1 - Operations Sampling Summary			
Matrix	**U.S. EPA Region**	**Qty. (18 Sep 2015)**	**Qty. (Cumulative)**
Surface Water Samples	8	9	510
	6	9	462
	9	5	273
	Total	**23**	**1,245**
Sediment Samples	8	10	268
	6	9	463
	9	5	219
	Total	**24**	**950**

2.3 Private Wells / Mitigation / Water Tanks

2.3.1 Private Wells

Operational activities for private drinking water well sampling are summarized below.

The assessment focus area for private drinking water wells in Region 8 includes those private drinking water wells located within 300 feet of the banks of the Animas River (including connected canals), between Baker's Bridge and the Colorado/New Mexico state line. The assessment focus area for private drinking water wells in Region 6 includes those private drinking water wells located within 500 feet of the banks of the affected waterways (Animas River, San Juan River and connected canals) within the Animas River watershed in New Mexico. There has been no sampling of private drinking water wells in U.S. EPA Region 9.

Private well samples that have metals concentrations greater than the Maximum Contaminant Levels (MCLs) and were collected from private drinking water wells during the first sampling event were sampled a second time to confirm the analytical results. In Region 8, the second round of samples at a given property were collected from the tap. Residents that have MCL exceedances have been notified.

For Region 6 there was one private drinking water well, which had a primary MCL exceedance. The well exceeded the MCL for lead, and after further assessment by the State of New Mexico and EPA it was determined that the exceedance was unrelated to the GKM incident.

A summary of private drinking water well sampling is presented below.

Table 2 – Private Drinking Water Well Sampling Summary			
Matrix	**U.S. EPA Region**	**Qty. (18 Sep 2015)**	**Qty. (Cumulative**
Private Drinking Water Well **Samples** Collected (from SCRIBE, includes QA/QC samples)	8	0	407
	6	0	286
Private Drinking Water Well **Locations Inside Focus Area**	8	0	55
	6	0	121
Private Drinking Water Well **Locations Outside Focus Area**	8	0	274
	6	0	0

Table 3 – Private Drinking Water Well Primary MCL Exceedances			
Matrix	U.S. EPA Region	Qty. (18 Sep 2015)	Qty. (Cumulative)
Within Focus Area: Private Drinking Water Wells Containing Contaminant Concentrations Above MCLs during Second Sampling Event	8	0	3
	6	0	1*
Outside of Focus Area: Private Drinking Water Wells Containing Contaminant Concentrations Above MCLs during Second Sampling Event	8	0	2
	6	0	0

*Note: One well in Region 6 exceeded the MCL for lead and after further assessment by the State of New Mexico and EPA, it was determined that the exceedance was unrelated to the GKM incident.

Private water well sampling in U.S. EPA Region 6 was completed on 27 August 2015. With the exception of one private water well sample collected on 15 September 2015, private water well sampling is no longer ongoing in U.S. EPA Region 6.

2.3.2 Mitigation

No public water systems are currently affected by the release or response operations. U.S. EPA purchased 1,232 cases of bottled water to supply the community. Bulk water delivery in Region 8 has been discontinued. ICPGK continues to coordinate and deliver bottled drinking water to **5** residences in Region 8.

The Region 6 agriculture and livestock team demobilized on 20 August 2015. There have been no potable water deliveries by the U.S. EPA in Regions 6 and 9, nor agricultural food deliveries by U.S. EPA in Region 8.

On 7 September 2015, U.S. EPA received a request for hay deliveries from the Navajo Nation. On 9 September 2015, U.S. EPA delivered 384 bales of hay to the Upper Fruitland chapter. Three deliveries of hay (384 bales each) are scheduled for Friday, 18 September 2015, and one hay delivery is scheduled for Monday, 21 September 2015.

The Southern Ute Indian Tribe (SUIT) has delivered drinking water and stock water to tribal members within the Reservation boundary. Approximate volumes to-date include:

- 100 cases of bottled water
- 18 water dispenser units and 42 – five-gallon water containers (210 gallons total).
- 8,000 gallons of bulk water deliveries (there have been no new requests in the past two weeks)

SUIT Tribal Housing Services completed the installation of 14 RO filtration systems at potentially impacted tribal residences.

The Bureau of Indian Affairs (BIA) provided the water to the Navajo Nation for livestock and agricultural use. A summary of the metrics is provided below:

- From 12 August to 31 August 2015, BIA delivered a total of approximately 975,888 gallons of water to seven stations located throughout Navajo Nation.
- The seven stations that received water were designated as follows: Upper Fruitland, Shiprock, Gadii Ahi, Teec, Aneth, Pt/Mexican Water and Monument Valley:
- For the seven locations, BIA serviced an average of 28 clients per day per location.

Public support activities completed are summarized below. Updated potable and non-potable water delivery quantities are provided below.

Table 4 - Public Support Summary

Activity	Entity	18 Sep 2015			Cumulative		
		Deliveries (each)	Qty. (gal)	Qty. (hay bales)	Deliveries (each)	Qty. (gal)	Qty. (hay bales)
Potable Water Deliveries	US EPA R8	0	0			105,600	
Livestock / Agricultural Water Deliveries	US EPA R8	0	0		47	133,770	
	US EPA R6				59	1,104,990	
	US EPA R9	0	0		13	218,400	
	BIA*	0	0		7	975,888	
Agricultural Food Deliveries	US EPA R6				1		244
	US EPA R9	0		0	15		5,760

*Note: BIA- Bureau of Indian Affairs delivered non-potable water to seven locations in the Navajo Nation from approximately 12 August 2015 to 31 August 2015.

2.3.3 Other Mitigation Activities

On 9 September 2015, U.S. EPA completed sediment removal activities in two settling ponds for a fish farm along the Animas River. One roll-off box of sediment removed from the settling was picked up and transported off-site on Friday 18 September 2015.

2.3.4 Water Tank Assessment & Demobilization

On or about 15 August 2015, 15 black steel tanks were delivered by the ERRS contractor to certain locations on the Navajo Reservation as part of the response to the Gold King Mine (GKM) Site. Each of these tanks is reported to have a capacity of 16,500 gallons. The Bureau of Indian Affairs (BIA) delivered water to these tanks. Metrics for water volumes are provided in Table 4 above.

On 19 August 2015, two tanks at the Upper Fruitland location were removed by the ERRS contractor. On 3 September 2015, the OSC and START conducted an assessment on 11 of the tanks. On 4 September 2015, five additional tanks were demobilized by the ERRS contractor.

3.0 PLANNING

On 17 September 2015, the ICPGK Planning Section Issued a new Incident Action Plan (IAP) covering an Operation Period from 0700 17 September 2015 to 0700 22 September 2015.

3.1 Environmental Unit

No Updates.

3.2 Resources

The table below summarizes staffing numbers for the federal entities and agencies active in the response.

Table 5 - Personnel On-Site

Region	Agency / Entity	Number of Personnel (18 Sep 2015)
Mine Operations	U.S. EPA	4
	U.S. Coast Guard	6
	U.S. EPA Contractors	21
	U.S. Geological Survey	0
ICPGK	U.S. EPA	25
	U.S. EPA Contractors	14
	USCG	0
	Other Federal, State, Local and Tribal Entities	1
6	U.S. EPA	0
	U.S. EPA Contractors	6
	USCG	0
	Other Federal, State, Local and Tribal Entities	0
9	U.S. EPA	1
	U.S. EPA Contractors	2
	USCG	0
	Other Federal, State, Local and Tribal Entities	0
	Total	**80**

No unmet critical resource needs reported.

4.0 FINANCE

4.1 Estimated Response Costs to Date

The table below summarizes estimated costs for the response.

Table 6 - Estimated Response Costs Reported as of 15 September 2015

Region	U.S. EPA * Cumulative Expended Payroll	U.S. EPA Cumulative Expended Travel	U.S. EPA Cumulative Other Charges	U.S. EPA Cumulative Contractors Cost	Total Cumulative Costs
8	$1,001,962	$210,713	$46,109	$3,489,130	$4,747,914
6	$563,873	$139,750	$12,989	$2,664,163	$3,380,775
9	$605.040	$93,000	$0	$1,910,951	$2,608,991
TOTAL	$2,170,875	$443,463	$59,098	$8,064,244	**$10,737,680**

4.2 Estimated Burn Rates

The table below summarizes current estimated burn rates for the response.

Table 7 - Estimated Daily Burn Rates

U.S. EPA Region	Estimated Daily Burn Rate (as of 15 Sep 2015)
8	$133,100
6	$43,850
9	$157,820
Total	**$334,770**

5.0 LOGISTICS

As of 13 September 2015, the following overhead personnel needs remain to be filled:

Planning Section Chief to replace current Planning Section Chief by 0700, 25 Sep 2015

6.0 SAFETY

Safety provided the safety briefing for four new personnel that arrived at the Incident Command Post (ICP).

Safety continued with editing the Health and Safety Plan to include operations in Regions 6, 8, 9 for the ICP Gold King personnel.

Wording on the Scope of Work for Coast Guard has been changed to include verbiage on safety oversight.

No recordable injuries or illnesses reported for 18 September 2015.

ICPKG has a Critical Incident Stress Management (CISM) program for personnel involved with the response. On 16 September 2015, the CISM office at the ICPGK command post received **5** contacts from response personnel. As of 16 September 2015, the CISM center has received **271** visits.

7.0 PUBLIC INFORMATION

7.1 Community Engagements

No community engagements were conducted on 16 September 2015. A summary of community engagements is provided below:

Table 8 - Community Engagement Summary		
Description	U.S. EPA Region	Qty. (18 Sep 2015)
Community Engagements	8	0
	6	0
	9	0

7.2 Anticipated Events: VIPs/Congressional Visits and Public Events

Known site visits and public events scheduled for the next 14 days are summarized below.

Table 9 - Anticipated Site Visits and Public Events Summary	
Planned Event	Anticipated Date
Department of Justice Visit to ICPGK and Mine Site	21-22 September 2015
Animas River Stakeholders Meeting	22 September 2015
Site Visit by Senator Ellen Roberts' Office	22 September 2015

7.3 Community Relations Branch

Effective 27 August 2015, calls to the Regional Call Center (970-385-8700) regarding the Gold King Mine Release Incident are being directed to the National Call Center (844-607-9700). The National Call Center is now being operated by U.S. EPA Headquarters. A total of **809** calls were received at the Regional Call Center during its operation by former Area Command (AC). A total of **223** calls were received at the National Call Center during its operation by AC, this included **120** calls related to Region 8, **67** calls related to Region 6 and **38** calls related to Region 9.

8.0 LIAISON

Federal, regional, local and other entities participating in the response are summarized below.

U.S. EPA
U.S. Coast Guard (USCG)
U.S. Geological Survey (USGS)
U.S. Army Corps of Engineers (USACE)
U.S. Bureau of Reclamation (USBOR)
U.S. Fish and Wildlife Services (USFWS)
Colorado Office of Emergency Management (OEM)
Colorado Department of Public Health and Environment (CDPHE)
New Mexico Environment Department (NMED)
New Mexico (NM) Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
State of Utah
State of Arizona

City of Durango
La Plata County
San Juan County
San Juan Basin Health Department
County of San Juan – New Mexico
Southern Ute Indian Tribe (SUIT)
Navajo Nation

9.0 SOURCE OF ADDITIONAL INFORMATION

For additional information, refer to www.epa.gov/goldkingmine .

ATTACHMENT 1
PRESS RELEASE

EPA United States Environmental Protection Agency

Related Topics: Emergency Response to Gold King Mine Release

Gold King Mine Data, September 19, 2015

Free viewers may be needed to access information linked on this page.

Data from Gold King Mine Response

EPA sediment samples collected on September 5th from locations along the Animas Rivers.

EPA has reviewed the data which includes comparison to screening levels for exposure during recreational use. The metal concentrations of the samples are below sediment/soil recreational screening levels, and are being maintained at pre-event conditions. Based on previous monitoring events it has been shown that metal concentrations may fluctuate from time to time because of water surges due to heavy rains or other events that may change the water flow rates or volume.

- Open or download the data file: Region 08 Sediment Summary Table 09-15-2015 (XLSX) (1 pg, 24 K)

EPA surface water samples collected on August 26th through September 4th from locations in the Animas River.

EPA has reviewed the data which includes comparison to screening levels for exposure during recreational use. The metal concentrations of the samples are below surface water recreational screening levels, and are being maintained at pre-event conditions. Based on previous monitoring events, it has been shown that metal concentrations may fluctuate from time to time because of water surges due to heavy rains or other events that may change the water flow rates or volume.

- Open or download the data file: Region 08 Surface Water Summary Table 09-15-2015 (XLSX) (1 pg, 237 K)

Last updated on September 19, 2015